Fall 2019 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including DWR Erosion Survey

San Joaquin River Basin

RD2094 Reclamation District No. 2094 Walthall	Overall LMA Rating	Total LMA Miles						
recommend biotriot No. 2004 Waltham	Α	3.23						
Rated Item		Maintena	nce Deficiency		Enforc	ement	Design & System Obsolescence	
Rateu item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Encroachments					0.02			
Supplemental								
DRAFT DWR UCIP Field Study					0.04			
LMA Totals:	0.00	0.00	0.00	0.00%	0.06	0.00	0.00	0.00
Unit No. 01 San Joaquin River RB	Overall Unit Rating	Total Unit Miles						
RD2094	A	2.78						
Rated Item	Maintenance Deficiency			Enforcement		Design & System Obsolescence		
Rated item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Encroachments					0.02			
Supplemental								
DRAFT DWR UCIP Field Study					0.04			
Unit Totals:	0.00	0.00	0.00	0.00%	0.06	0.00	0.00	0.00
Unit No. 02 San Joaquin River	Overall Unit Rating	Total Unit Miles						
RD2094	Α	0.45						
Rated Item		Maintena	nce Deficiency		Enforc	ement	Design & Obsole	
Rated item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
No Items								
Unit Totals:	0.00	0.00	0.00	0.00%				

Winter **

Flood Control Project Maintenance Levee Inspections

LMA District Cover Sheet

Fall 2019 Levee Inspection Results

Reclamation District No. 2094 Walthall

Summer **

Spring

	(March - May)	(June - August)	(September - November)	(December - February)		
† Overall LMA Rating (Fall Only)						
	** Non-receipt of Summ Reports may effect or					
FALL INSPECTIONS: The overall maintena	d using the same criterance rating shown abo	ria in the spring and i	n the fall. tion and maintenance de	ficiencies identified		
within the attached u	nit inspection reports.	This rating is not inte	ended to be an indiction o	of risk.		

Unit Cover Sheet

Fall 2019 Levee Inspection Results

Reclamation District No. 2094 Walthall

Waterway	Bank	Unit Miles
Unit No. 01 San Joaquin River	Right	2.78

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	5/1/2019 - 5/1/2019		11/21/2019 - 11/21/2019	
DWR Inspector	Alberto De Leon		Alberto De Leon	
Accompanied By	Brian Mizuno RD 2094		Brian Mizuno RD 2094	
	Wade Wylie DWR			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2094 Walthall

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	11/21/2019 11/21/2019	Alberto De Leon

LM Start		Rating **	Α	Issue No.		10	
LM End		Issue Type +	Ма	Location *		N/A	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory	Category			Start		End	
ltom	Flood Pre	paredness &		0		0	
item	Item				0		0
DWR ID	DWR_RD2	094_01_s _ 201	3_10				
		Comn	nent Coc	le			
		Inspecto	or Comm	ent			
	LMA has a flood response plan in the office. It is recommended for LMA and interested local volunteers to take a flood fight training class in						

No Photos

Rating ** Issue No. LM Start Α 11

order to refresh on skills and methods.

Issue Type + Ма Location * N/A LM End Earthen Levee GPS Latitude/Longitude Category Start End Emergency Supplies & Item Equipment DWR_RD2094_01_s _ 2013_11 DWR ID Comment Code Inspector Comment Supplies available on-site.

No Photos

Rating ** Issue No. 12 LM Start Α Issue Type + Ма Location * N/A LM End GPS Latitude/Longitude Earthen Levee Category Start End Operations & Maintenance Item Manuals DWR ID DWR_RD2094_01_s _ 2013_12 Comment Code Inspector Comment O&M Manual available at LMA's office.

No Photos

* Location

N/A: Not Applicable

LS : Land Side WS: Water Side CR : Crown

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2094 Walthall

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	11/21/2019 11/21/2019	Alberto De Leon

LM Start	0.10	Rating **	М	Issue No.		4
LM End	0.10	Issue Type +	En	Location *	WS	
Category Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End
Item	Encroachi	ments		37.7716	85 °	37.771685°
пеш				-121.3002	39°	-121.300239°
DWR ID DWR_RD2094_01_s _ 2012_4						·

Comment Code

RA: Ramp

Inspector Comment

An access ramp has been built on the waterside and extends into the channel. This could potentially alter the channel capacity. This item was also noted in the USACE comments.

LM Start	0.10	Rating **	М	Issue No.	4 (cont)
LM End	0.10	Issue Type +	En	Location *	WS

Photo 1 of 2: FA_2019_RD2094_320_4_20191121_00016.jpg



View of ramp on waterside slope. Fall 2019

Photo 2 of 2: FA_2019_RD2094_320_4_20190830_00001.jpg



Tire marks shown onto the ramp from levee. Raised area extends to the trees in the background in the center of the photo.

LM Start	0.28	Rating **	С	Issue No.		9				
LM End	0.28	Issue Type +	En	Location *		LS				
Category	Earthen L	GPS La	atitud	e/Longitude						
Category	Category					End				
Item	Encroachi	ments	37.7692	81°	37.769281	0				
пеш		-121.300832 °			-121.300832	0				
DWR ID DWR_RD2094_01_s _ 2019_9										
		Comn	nent Coo	de						
PI : Pipe										
		Inspecto	or Comm	nent						
Erosion ha	is been rep	oaired.								

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side	A : Acceptable M : Minimally Acceptable	N : Not Inspected/Rated C : Corrected	Ma : Maintenance Deficiency Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2094 Walthall

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	11/21/2019 11/21/2019	Alberto De Leon

LM Start	0.65	Rating **	М	Issue No.		13
LM End	0.65	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory			Start		End	
Item		WR UCIP Fie	ld	37.7675	14°	37.767514°
пеш	Study		-121.2949	26°	-121.294926°	
DWR ID	23086					·

Inspector Comment

Comment Code

DS_ID:23086 FS_ID:21464 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - walkway in poor condition and needs repair.-

electric conduit on waterside.

FIELD_STRUCT_DESC: 14-inch concrete encased steel irrigation discharge pipe and galvanized iron (GI) electrical conduit through the levee, 10 feet below the crown. Two concrete cutoff walls. Pump mounted on a pile structure in the stream. Slide gate in a 54-inch corrugated metal pipe (CMP) riser on the waterside (WS) shoulder. Concrete distribution box and service pole at the landside (LS) toe. Installed by USACE in 1962. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 3, December 1968, (HLM 0.66)].

FS Date: 9/10/2013

LM Start	0.65	Rating **	М	Issue No.	13 (cont)
LM End	0.65	Issue Type +	En	Location *	



WS view: gate valve in CMP riser (bottom) and pipe & pump (top) on piling structure in the channel.

Photo 2 of 3: UCIP_FA_2019_21464_36404.jpg



WS view: pump on piling structure in the channel. Pipe (right- bottom) and conduit (bottom- left).

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2094 Walthall

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	11/21/2019 11/21/2019	Alberto De Leon

LM Start	0.65	Rating **	М	Issue No.	13 (cont)		
LM End	0.65	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Category	Category					End	
Item	DRAFT D	WR UCIP Fie	ld	37.76751	4 °	37.767514°	
пеш	Study			-121.29492	6°	-121.294926°	
DWR ID	23086						
	Comment Code						

Inspector Comment

DS_ID:23086 FS_ID:21464 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - walkway in poor condition and needs repair.-

electric conduit on waterside.

FIELD_STRUCT_DESC: 14-inch concrete encased steel irrigation discharge pipe and galvanized iron (GI) electrical conduit through the levee, 10 feet below the crown. Two concrete cutoff walls. Pump mounted on a pile structure in the stream. Slide gate in a 54-inch corrugated metal pipe (CMP) riser on the waterside (WS) shoulder. Concrete distribution box and service pole at the landside (LS) toe. Installed by USACE in 1962. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 3, December 1968, (HLM 0.66)].

FS Date: 9/10/2013



LS view: exposed pipe, service pole, and concrete distrinution box on levee toe.

LM Start	0.91	Rating **	Α	Issue No.	6		
LM End	0.91	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
				Start		End	
Item	Vegetatio	n			09°	° 37.764209°	
item				-121.293559°		° -121.293559°	
DWR ID	DWR_RD2	094_01_f _ 201	9_6				
Comment Code							

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

Annual vegetation is well maintained.



View of vegetation on landside slope. Fall 2019

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A: Acceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2094 Walthall

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	11/21/2019 11/21/2019	Alberto De Leon

LM Start	0.91	Rating **	М	Issue No.		8
LM End	0.91	Issue Type +	En	Location *		WS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Encroachi	ments		37.7641	69°	37.764169 °
пеш				-121.2935	62 °	-121.293562 °
DWR ID	DWR_RD2	094_01_s _ 201	7_8			
		Comn	nent Cod	de		
AV : Aban	doned veh	icles				
		Inspecto	or Comm	nent		
There is an abandoned boat on the waterside slope.						



View of the boat on the levee slope.

LM Start	1.25	Rating **	М	Issue No.		14	
LM End	1.25	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DRAFT DWR UCIP Field			37.7605	81 °	37.760581 °	
Study		-121.2973	73°	-121.297373°			
DWR ID	23087						

Inspector Comment

Comment Code

DS_ID:23087 FS_ID:21544 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - working as drainage system during field visit. Pump was not running.- electric conduit on WS- open pipe end in CMP

riser. CMP needs cleaning.

FIELD_STRUCT_DESC: 20-inch concrete encased steel irrigation discharge pipe through the levee, 10 feet below the crown. Two concrete cutoff walls. Pump mounted on a pile structure in the stream. Slide gate in a 54-inch corrugated metal pipe (CMP) riser on the waterside (WS) shoulder. Concrete distribution box and service pole at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 3, December 1968, (HLM 1.27)]. FS Date: 9/10/2013

Photo 1 of 3: UCIP_FA_2019_21544_36524.jpg



WS view: overview of pump (top) and CMP riser (bottom)

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2094 Walthall

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	11/21/2019 11/21/2019	Alberto De Leon

LM Start	1.25	Rating **	М	Issue No.		14 (cont)
LM End	1.25	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DRAFT D	WR UCIP Fie	ld	37.76058	1 °	37.760581 °
пеш	Study			-121.29737	3°	-121.297373°
DWR ID	23087					·

Comment Code

Inspector Comment

DS ID:23087 FS_ID:21544 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - working as drainage system during field visit. Pump was not running.- electric conduit on WS- open pipe end in CMP

riser. CMP needs cleaning.

FIELD_STRUCT_DESC: 20-inch concrete encased steel irrigation discharge pipe through the levee, 10 feet below the crown. Two concrete cutoff walls. Pump mounted on a pile structure in the stream. Slide gate in a 54-inch corrugated metal pipe (CMP) riser on the waterside (WS) shoulder. Concrete distribution box and service pole at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 3, December 1968, (HLM 1.27)]. FS Date: 9/10/2013

LM Start	1.25	Rating **	М	Issue No.	14 (cont)
LM End	1.25	Issue Type +	En	Location *	



WS view: pipe and pump on piling structure in the channel. Walkway in poor condition.

Photo 3 of 3: UCIP_FA_2019_21544_36522.jpg



WS view: damaged gate valve handle in CMP riser on levee shoulder.

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2094 Walthall

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	11/21/2019 11/21/2019	Alberto De Leon

LM Start	2.25	Rating **	М	Issue No.		15
LM End	2.25	Issue Type +	En	Location *		
Category			GPS Latitude/Longitude			
Calegory	legory			Start		End
ltom	DRAFT D	WR UCIP Fie	ld	37.75223	80°	37.752230°
пеш	Study Study		-121.29640)8 °	-121.296408°	
DWR ID 23088						

Comment Code

Inspector Comment

DS_ID:23088 FS_ID:41726 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - dense vegetation on WS.- working during field

survey.- slide gate not found on WS.

FIELD_STRUCT_DESC: 20-inch concrete encased steel irrigation discharge pipe through the levee, 6 feet below the crown. Two concrete cutoff walls. Slant pump mounted on a frame structure on the stream bank. Slide gate in a 54-inch corrugated metal pipe (CMP) riser on the waterside (WS) shoulder. Concrete distribution box and service pole at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 3, December 1968, (HLM 2.30)]. FS Date: 9/10/2013

LM Start	2.25	Rating **	М	Issue No.	15 (cont)
LM End	2.25	Issue Type +	En	Location *	



WS view: slant pump (top) on stream bank and CMP riser on levee shoulder.

Photo 2 of 3: UCIP_FA_2019_41726_36501.jpg



WS view: slant pump on stream bank and dense vegetation on stream

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2094 Walthall

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	11/21/2019 11/21/2019	Alberto De Leon

LM Start	2.25	Rating **	М	Issue No.		15 (cont)	
LM End	2.25	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item		WR UCIP Fie	ld	37.75223	0 °	37.752230 °	
Study		-121.29640	8 °	-121.296408 °			
DWR ID	23088					·	

Inspector Comment

Comment Code

DS_ID:23088 FS_ID:41726 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - dense vegetation on WS.- working during field

survey.- slide gate not found on WS.

FIELD_STRUCT_DESC: 20-inch concrete encased steel irrigation discharge pipe through the levee, 6 feet below the crown. Two concrete cutoff walls. Slant pump mounted on a frame structure on the stream bank. Slide gate in a 54-inch corrugated metal pipe (CMP) riser on the waterside (WS) shoulder. Concrete distribution box and service pole at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 3, December 1968, (HLM 2.30)]. FS Date: 9/10/2013



WS view: inside view of CMP riser on levee shoulder. No slide gate found.

LM Start	2.45	Rating **	М	Issue No.	16		
LM End	2.45	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DRAFT DWR UCIP Field			37.75230	8°	37.752308°	
Study			-121.29319	1°	-121.293191°		
DWR ID	23089						
Comment Code							

Inspector Comment

DS_ID:23089 FS_ID:21545 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - no pipes found on either side of the levee.concrete distribution box on LS. Soil erosion around distrinution box. FIELD_STRUCT_DESC: Rectangular concrete distribution box on the

landward toe FS Date: 9/10/2013

Photo 1 of 3: UCIP_FA_2019_21545_36529.jpg



WS view: no pipe found on waterside.

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2094 Walthall

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	11/21/2019 11/21/2019	Alberto De Leon

LM Start	2.45	Rating **	М	Issue No.		16 (cont)
LM End	2.45	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory	egory			Start		End
Item	DRAFT D	WR UCIP Fie	ld	37.75230)8°	37.752308°
пеш	Study			-121.2931	91 °	-121.293191 °
DWR ID	23089					

Comment Code

Inspector Comment

DS_ID:23089 FS_ID:21545 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - no pipes found on either side of the levee.concrete distribution box on LS. Soil erosion around distrinution box. FIELD_STRUCT_DESC: Rectangular concrete distribution box on the landward toe

FS Date: 9/10/2013

LM Start	2.45	Rating **	М	Issue No.	16 (cont)
LM End	2.45	Issue Type +	En	Location *	



Enter photo 2 description or comment here.

Photo 3 of 3: UCIP_FA_2019_21545_36527.jpg



LS view: erosion around a concrete standpipe on the landside toe.

Unit Cover Sheet

Fall 2019 Levee Inspection Results

Reclamation District No. 2094 Walthall

Waterway	Bank	Unit Miles
Unit No. 02 San Joaquin River		0.45

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	5/1/2019 - 5/1/2019		11/21/2019 - 11/21/2019	
DWR Inspector	Alberto De Leon		Alberto De Leon	
Accompanied By	Brian Mizuno RD 2094		Brian Mizuno RD 2094	
	Wade Wylie DWR		Wade Wylie DWR	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2094 Walthall

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 San Joaquin River		0.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	0.14	Rating **	С	Issue No.		2		
LM End	0.14	Issue Type +	Ma	Location *		WS		
Earthen Levee				GPS La	atitud	e/Longitude		
Category						End		
Slope Stability			37.7603	39°	37.760339°			
item			-121.3017	41 °	-121.301741 °			
DWR ID	DWR ID DWR_RD2094_02_s _ 2019_2							
		Comn	nent Cod	de				
S3 : Repai access wh		slope damag le.	ed by ve	ehicle traffic	and	I prevent		
Inspector Comment								

No Photos

Rating ** Issue No. Α LM Start 0.40 Location * LS 0.40 Issue Type + Ма LM End Earthen Levee GPS Latitude/Longitude Category Start End Vegetation 37.760637° 37.760637° Item -121.306370 ° -121.306370 ° DWR_RD2094_02_f _ 2019_1 DWR ID Comment Code

V1: Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

Annual vegetation is well maintained.



View of vegetation on landside slope. Fall 2019

N : Not Inspected/Rated C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement